RAM Replay Q&A

Animal versus Human Studies
Q: Are studies in animal models that directly support development of computational models and/or human studies considered responsive to the BAA?
A: TA1 and TA2 are focused on human memory. Any work proposed using animal subjects would require sufficient justification.

Q: Task 1 is expected to use "rigorous computational methods to help investigators determine not only which brain components matter in memory formation and recall but also how much they matter". Since the BAA is expected to deliver devices to be tested in humans, and the available tools to manipulate brain components in humans is rather limited, I wonder whether you consider testing the computational models from data obtained in animals, and how much one can be "penalized" for using animal models.
A: Any work proposed using animal subjects would require justification in the context of the goals of TAs 1 and 2. Please see the evaluation criteria in section 5 of the BAA.

Q: Is it competitive to propose parallel animal research to validate the human-based modeling in TA1?
A: We cannot comment on if a proposed approach is competitive or not. TA1 and TA2 are focused on human memory. Any work proposed using animal subjects would require sufficient justification.

RAM versus RAM Replay
Q: What is the expected relationship between Replay and the current RAM program?
A: Both the RAM and RAM Replay efforts seek to facilitate memory formation and recall. The scientific approach, techniques, and experimental paradigms proposed for RAM replay should directly address the requirements specified in DARPA-BAA-15-34.

Q: Will Replay performers work closely with (or under) existing RAM performers?
A: DARPA is not requiring potential RAM Replay performers to work with existing RAM performers. It is the proposer's discretion to determine the best teaming.

Hardware/Portability
Q: Are we expected to utilize operable, deployable COTS hardware? Or is it reasonable for TA1 work to use in-laboratory equipment that is man-portable but not field-deployable and laboratory tasks that are DoD-relevant?
A: DARPA is not requiring the use of COTS hardware. DARPA is not requiring field-deployable hardware. DARPA is requiring man portable hardware that can be used to achieve the goals of the TA2 assays. All hardware choices (COTS, custom, field-deployable, etc.) must be justified in the context of the goals of RAM Replay.

Q: p. 9 of BAA talks of man portability of final device/application. Does this rule out fMRI?
A: If fMRI were to be proposed, it would need to be man portable.

Task Types
Q: For TA2, is the intention of the task to get a "memory" tasks or "motor skills" – or specifically targeted at the intersection between the two? Seems like there is potential for conflating effects if not careful in selection. How physical do the targeted skills need to be?
A: It is up to the proposer's discretion to design assays that address the effects of replay. The test paradigm must include operationally-relevant behavioral assessments that involve explicit reporting of events, use of newly learned knowledge, skill acquisition/use, or combinations of all three. It is up to the proposer to determine and justify how the five components of TA1 and three components of TA2 are involved in the program metrics.

Q: If possible, can you share what you have in mind for DoD-relevant procedural memories?
A: The test paradigm must include operationally-relevant behavioral assessments that involve explicit reporting of events, use of newly learned knowledge, skill acquisition/use, or combinations of all three. It is up to the proposer to determine and justify the specific DoD relevant task.

Q: Will actual field work be preferred in regards to TA2?
A: Proposers must develop a virtual or real situational paradigm in which human participants experience events that are of relevance to the Department of Defense (DoD). Operationally-relevant behavioral assessments must also be used. Proposers should justify the choice of field work that will best address the goals of the RAM Replay BAA.

Other
Q: Can neural data and situational paradigms be shared with team members in Europe?
A: Non-U.S. organizations are/or individuals may participate to the extent that such participants comply with any necessary nondisclosure agreements, security regulations, export control laws, and other governing statutes applicable under the circumstances. See Section 4.2 "Security and Proprietary Issues" regarding the proposers capabilities to perform research and development at the classification level they propose.

Q: Is there an upper limit for the budget we can propose?
A: There is no upper limit on the proposed budget. All budgets need to be sufficiently justified in the context of the goals of the RAM Replay BAA and are subject to the availability of funds.